3. (Reiterated) The method of claim 2, further comprising obtaining a plurality of sections from the recipient array with each section containing a plurality of donor specimens that maintain their assigned locations.

4. (Reiterated) The method of claim 2, wherein the donor specimen is placed in a receptacle having a cross-sectional size and shape complementary to a cross-sectional size and shape of the elongated specimen.

5. (Reiterated) The method of claim 2, wherein the preformed elongated receptacles are cylindrical bores in the recipient member, and each specimen is obtained by boring a cylindrical tissue specimen from the donor material.

6. (Reiterated) The method of claim 5, wherein a diameter of each elongated receptacle is substantially identical to the diameter of the specimen that is placed in the receptacle.

7. (Reiterated) The method of claim 2, further comprising associating a clinical or laboratory characteristic, or both, with each assigned location in the recipient array, wherein the clinical laboratory characteristic is other than information obtained from the array.

8. (Reiterated) The method of claim 2, wherein the biological sample is a tissue specimen or cellular preparation.

9. (Reiterated) The method of claim 2, wherein the receptacles are in a substantially regular array, spaced by a distance of about 0.05 mm between adjacent edges of the receptacles.

10. (Reiterated) The method of claim 2, wherein at least hundreds of donor specimens are spaced in a substantially regular array.

11. (Reiterated) The method of claim 10, wherein at least about 372 donor specimens are spaced in the substantially regular array.

12. (Reiterated) The method of claim 2, wherein the receptacles are formed in a substantially regular array by a coordinate positioning system.

13. (Reiterated) The method of claim 12, wherein the donor specimens are placed in assigned receptacles by the coordinate positioning system.

14. (Reiterated) The method of claim 13, wherein information about each donor specimen is recorded with reference to a coordinate positioning system.

15. (Reiterated) The method of claim 14, wherein the information about each donor specimen includes clinical information about a subject from whom the biological specimen was obtained.

16. (Reiterated) The array formed by the method of claim 2.

17. (Reiterated) A section of the recipient array, made by the method of claim 3.

18. (Amended) A [system] method of preparing an array of tissue specimens, comprising:

providing one or more donor blocks comprising a biological specimen embedded in embedding medium;

boring one or more donor sample cores from the biological specimen in one or more of the donor blocks;

boring receptacle cores from a recipient member to form an array of preformed receptacles at coordinate positions determined by the system; and

placing [the] one or more donor sample cores in the preformed complementary receptacles at assigned locations in the array, such that the assigned locations are maintained.

19. (Reiterated) The method of claim 18, further comprising sectioning the recipient embedding medium transverse to the donor sample cores to obtain a cross-section of the donor sample cores in the array, while maintaining the assigned locations in the array in consecutive cross-sections.

20. (Reiterated) The method of claim 18, further comprising automatically recording an identification of each donor sample, including clinical or laboratory information, or both, about the donor sample.

21. (Reiterated) The method of claim 18, further comprising aligning a thin tissue section above the donor block to identify an area of interest from which the donor sample core is taken.

22. (Amended) The method of claim 18, wherein the cylindrical donor sample core has a diameter [that is less than] from about 0.1 mm to about 4 mm.

23. (Reiterated) The method of claim 22, wherein the automated system forms an array of substantially equally spaced receptacles that are less than about 4 mm in diameter.

24. (Reiterated) The method of claim 23, wherein the substantially equally spaced receptacles are positioned with an automated coordinate positioning system.

25. (Reiterated) A cross-section of the donor sample cores obtained by the method of claim 10.

26. (Reiterated) An apparatus for preparing specimens for parallel analysis of sections of biological material arrays, comprising:

a donor block holder for holding a tissue donor block in a donor position; and

a reciprocal punch positioned in relation to the holder to punch a tissue specimen from the tissue donor block when the donor block is in the donor position; and

a recipient block holder for holding a recipient block in a recipient position, wherein the recipient block comprises an array of receptacles, each of which is positionable in a preselected position in relation to the reciprocal punch to deliver a tissue specimen from the reciprocal punch into a receptacle in the preselected position.

27. (Reiterated) The apparatus of claim 26, wherein the holder comprises an x-y positioning device that can be incrementally moved to align sequential receptacles and the reciprocal punch.

28. (Reiterated) The apparatus of claim 26, further comprising a stylet positioned for introduction into the reciprocal punch to expel the tissue specimen from the punch into one of the receptacles aligned with the punch.

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29. (Amended) The apparatus of claim 26, further comprising a positioner [that positions] for positioning a reference slide over the donor block, to align structures of interest in the reference slide with corresponding tissue specimen regions in the donor block.

30. (Reiterated) The apparatus of claim 26, further comprising a separate reciprocal punch capable of being positioned relative to the recipient block punching the array of receptacles in the recipient block, wherein the separate reciprocal punch is different than the reciprocal punch positioned to punch the specimen from the tissue donor block.

31. (Amended) The apparatus of claim 26, further comprising a recorder [that records] for recording coordinate positions of the receptacles in the recipient block.

32. (Reiterated) The apparatus of claim 31, wherein the recorder is a computer implemented system for recording the positions of the receptacles, and recording an identification of the tissue specimen that is placed in each receptacle.

33. (Reiterated) The apparatus of claim 32 wherein the identification includes information about the biological material that is not obtained from analysis of sections of the biological material.

34. (Amended) The apparatus of claim 26, further comprising a sectioning device [that cuts] for sectioning the recipient block into sections that can be subjected to different analyses.

35. (Amended) The apparatus of claim 34, [wherein] further comprising a recorder for recording results of the different analyses [of the sections are recorded]in association with information about the biological material that is not obtained from analysis of the sections themselves.

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36. (Amended) The recipient block of claim 26, wherein the block comprises a regular array of spaced biological specimens in fixed assigned locations.

37. (Reiterated) One or more of the sections of claim 34.

38. (Amended) An automated system for making arrays of biological specimens for serial analysis, the system comprising:

a recipient array having a plurality of spaced elongated receptacles into which different biological specimens can be placed in fixed positions;

[an automatic delivery mechanism that introduces] a reciprocal punch for introducing sequential biological specimens into different receptacles at assigned coordinate positions of the array; and

a recorder [that identifies] for identifying the biological specimen in each of the different receptacles at the assigned coordinate positions.

39. (Amended) The automated system of claim 38, [wherein the automatic system also] further comprising a record for recording [records] clinical or laboratory information about the biological specimen, or both.

40. (Amended) The automated system of claim 39 [wherein the automated system correlates] further comprising a correlating device for correlating the clinical or laboratory information, or both, with the serial analysis performed on sequential sections of the recipient array.

41. (Amended) The system of claim 38, wherein the system further comprises a donor block [from which the] providing a biological specimen. [is obtained by a punch.]

42. (Reiterated) The system of claim 38, further comprising an incremental positioner that incrementally moves the recipient array or delivery mechanism to the assigned coordinate positions after each sequential biological specimen is introduced into each receptacle.

43. (Reiterated) The system of claim 38, wherein the delivery mechanism is a punch which punches a tissue specimen from a donor receptacle.

44. (Reiterated) The system of claim 41, wherein the recipient array is formed by punching an elongated receptacle in the recipient array, automatically moving the recipient array or punch incrementally to align the punch with a new coordinate position on the recipient array, and punching another elongated receptacle in the new position.

45. (Reiterated) The system of claim 44, wherein the delivery mechanism delivers each biological specimen to a receptacle at a recorded position in the recipient array.

46. (Amended) A computer implemented system for parallel analysis of consecutive sections of biological material arrays, comprising:

an x-y positioning platform that moves a tray to a plurality of coordinates that correspond to positions in a recipient block array;

a receptacle punch positioned [to punch] for punching a receptacle core from a recipient block on the positioning platform,

a donor punch positioned [to punch] for punching a donor specimen from a donor block on the positioning platform, wherein the receptacle core has a diameter that is substantially the same as a diameter of the donor specimen;

a stylet that is selectively alternatively aligned with the donor punch and the recipient punch, for displacing contents of the receptacle punch after a receptacle core is punched from the recipient block, and for displacing contents of the donor punch into receptacles of the recipient block array after a donor specimen is punched from the donor block; and

[wherein the system records] a recorder for recording an identification of the biological material in the receptacles of the recipient array.

47. (Reiterated) The computer implemented system of claim 46, further comprising a microscope for viewing the donor block, and locating a structure of interest in a reference slide aligned with the donor block.

48. (Reiterated) The computer implemented system of claim 46, wherein the system punches a receptacle core from the recipient block and displaces the receptacle core from the receptacle punch with the stylet, then punches a donor specimen from the donor block, aligns the donor punch with a selected receptacle in the recipient block, and displaces the donor specimen into the selected receptacle.

49. (Reiterated) The computer implemented system of claim 46, wherein the identification of the biological tissue includes clinical or laboratory information, or both, about the biological material in each of the receptacles.

50. (Reiterated) The computer implemented system of claim 49, wherein the biological material is a tumor embedded in a block.

REMARKS

The amendments made herein are the same as those made under Article 34 during international prosecution.

Respectfully submitted,

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